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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,748	09/29/2003	Daniel T. Garman	203036	1462

7590 05/25/2005

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EXAMINER

HUSBAND, SARAH E

ART UNIT PAPER NUMBER

1746

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,748	GARMAN ET AL.	
	Examiner	Art Unit	
	Sarah E. Husband	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show Items 344, 346 and 348 (page 30, ll. 10-11) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

The drawings are objected to because item 102 is referred to on page 15, l. 11 but is not shown in the drawings (Fig. 4). However, item 100 points to two different structures one of which could be the slots as referred to in the specification. Applicant should clarify the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

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not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “45” has been used to designate both a manifold and safety cage (pg. 12, ll. 8 and 17), reference character “175” has been used to designate an air conditioning assembly, lubricator/regulator and bleed valve (pg. 21, ll. 23, pg. 20, ll. 20 and 23), reference character “292” in Figure 13 identifies two different items, one of which is a bore, and reference character “342” in Figure 16 shows two different items. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape

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used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The abstract of the disclosure is objected to because the length exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: different parts of the invention are identified by the same number as discussed above in the objection to the drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 10 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "said web" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 34 states, "reel means coupled to passively follow." It is unclear as to what the reel means is passively following and therefore the metes and bounds of the claim cannot be determined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 8 and 13-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner (Operation Manual 10,000 PSI – “V” Drum) as described in applicant’s specification.

Gardner discloses an apparatus for cleaning residue from a bore of a tube, comprising a hose having a spray tip; a water source coupled to said hose and capable of delivering water to said hose at a pressure in excess of 1,000 psi; and a framework supporting i) transport means for extending and retracting said hose with a reciprocating motion, ii) reel means for collecting and distributing said hose and for layering said hose into coils concentric to said drive axis, and iii) means for rotating said transport means, whereby said hose and spray tip are rotated as they extend and retract along a bore of said tube to remove said residue (Introduction in Manual and pg. 2, ll. 9-21 of specification). Gardner does not specifically show a nozzle with a plurality of orifices, however, it is common in this art to use this type of nozzle and the Jetting Systems’ logo on the drawing sheets shows the hose with a plurality of streams coming from the nozzle which would relate to a plurality of orifices. Gardner also describes a brake means (Drawing PNMT7510). Although Gardner describes a drum brake, it would be obvious to one skilled in the art to replace the drum brake with a disc brake which is known to provide better stopping. The Courts have upheld that design choice is obvious, *In re Kuhle* 188 USPQ 7.

Gardner also discloses an operator control gun coupled to said framework and having a bore through which said hose is directed (Fig. 1-A) and the control gun includes a plurality of air valves for directing the operation of said transport means and said reel means. The control gun states that it has controls for "rotation" and "extend/retract" and that these are air-powered functions and therefore would have air valves regulating air flow. There are also two air motors directing the movement of the hose (I. Principles of Operation). Gardner discloses the transport means includes a plurality of pinch wheels (with grooves) mounted to contact said hose and control means for directing the reciprocating axial movement of said hose in synchrony with the rotational movement of said hose (I. Principles of Operation). Gardner further discloses the apparatus wherein the transport means has a tensioner (II. Set-up), one pinch wheel rotates and the other is stationary (Drawing PNCH7510) and the reel means is coupled to passively follow said transport means (Drawing RLC7510K). Gardner also discloses the control gun controlling the rotation of the pinch wheels because it is stated that the gun controls the extension and retraction of the hose thereby including the rotation of the pinch rollers, which move the hose. Gardner discloses the transport means includes an air swivel (Drawing PNMT7510) and the transport means and reel means are supported from and secured to bearing surfaces (Drawing CRDL7510). Gardner also discloses a reel means including a hub mounted concentric to said longitudinal drive axis (Drawing RLC7510K).

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Clotz (US Patent No. 2,267,493).

Gardner discloses the tube-cleaning apparatus as shown above in the 103(a) rejection. Gardner does not disclose a plurality of webs, each having a channel, and the transport means including a member for directing the hose to and from the channel of said webs or annular bands mounted to the webs. Gardner also does not disclose the endless shroud. Clotz discloses the webs each having a channel or the part where the hose passes over the web (Fig. 3, Item 20), the member directing the hose (Fig. 5, Items 24, 25), the annular bands (Fig. 1, Item 21) and the shroud (Fig. 1, Item 29).

Gardner and Clotz are analogous art because they are from the same field of endeavor, tube-cleaning apparatus. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the reel disclosed by Gardner with the shroud and web type design shown by Clotz for the benefit of storing and containing the hose easily and avoiding kinks or knots in the hose.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of the advertisement of Jetting Systems "Rotary Flex-Lancer." This advertisement was admitted as prior art in the parent application, which was filed on March 16, 2001 and is now Patent No. 6,626,195 B1.

Gardner discloses the tube-cleaning apparatus as shown above in the 103(a) rejection. Gardner does not disclose the rotation or extend/retract speeds of the hose. Jetting Systems discloses that the rotation is 0-60 RPM, the extension is 0-45 FPM and the retraction is 0-60 FPM. These ranges are within the ranges of the claimed invention.

Gardner and Jetting Systems are analogous art because they are from the same field of endeavor, tube-cleaning apparatus. At the time of the invention, it would have been obvious to one of ordinary skill in the art to adjust the speed capabilities of the system disclosed by Gardner to perform a faster cleaning operation.

Double Patenting

Claims 1, 20, 27 and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,626,195. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of claim of the application fully encompasses the scope of claim 1 of the patent.

With respect to claim 1 of the application, it states, “an apparatus for cleaning residue from a bore of a tube, comprising a hose having a spray tip containing a plurality of orifices; a water source coupled to said hose and capable of delivering water to said hose at a pressure in excess of 1,000 psi; and a framework supporting i) transport means for extending and retracting said hose with a reciprocating motion, ii) reel means for collecting and distributing said hose along a longitudinal drive axis common to each of said transport means and reel means and for layering said hose into coils concentric to said drive axis, and iii) means for rotating said transport means, whereby said hose and spray tip are rotated as they extend and retract along a bore of said tube to remove said residue.” Claim 34 includes the phrase, “coupled to passively follow” and claims 20 and 27 include a control gun. The differences in the patented claim from claim 1 are, “the means for simultaneously rotating said transport

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means and said reel means” in part iii and the hose is “stacked” instead of “layered.” These applicants claim broadens the scope and/or provides minute variations to the claim language, however, these changes are not patentably distinct, as the previously patented claim would read on the applicants claim. Claims 20, 27 and 34, although not exactly the same as the patent claims, also do not provide patentable distinction. With respect to claim 34, it would be obvious to have the reel means passively follow (the transport means) because if it did not, the hose would get tangled or have kinks in it and thus the tube-cleaning apparatus would not function properly. Referring to claims 20 and 27, the addition of a control gun would be obvious to one of ordinary skill in the art as many of these types of cleaning apparatus have control guns in order to operate the apparatus.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not referred to is Pacht (US Patent No. 3,987,963), who teaches a high pressure fluid delivery system.

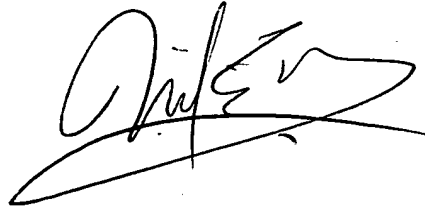
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah E. Husband whose telephone number is (571) 272-8387. The examiner can normally be reached on M-F 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached at (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEH

MICHAEL BARR
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Michael Barr', with a large, sweeping horizontal stroke underneath.